ABSTRACT OF THE DISCLOSURE

A solid-state image pickup device is formed such that a charge transfer electrode, a field plate electrode, and a gate electrode are formed of an electrically conductive single-layer electrode material film, and the gaps between the electrodes are filled with an insulating film having a reflow property to be flattened, thereby reducing the height of the device and alleviating the irregularities of the surface. This makes it possible to reduce the thickness of the flattening film required for flattening the device upon formation of micro-lenses and provide an improved sensitivity to the solid-state image pickup device.